because these figures were in the Parent Application, Application Serial No. 09/681,420 filed March 30, 2001, that these figures are therefore "prior art." However, Application Serial No. 09/681,420 is not valid prior art against the current application. The Examiner's objection is inconsistent with the law and the MPEP.

A legend such as – Prior Art – is appropriate only when "that which is old is illustrated" in appropriate prior art. However, a parent application is not prior art against a continuation–in–part (CIP) application claiming priority to the parent application because the CIP application claiming priority to the parent application is granted the effective filing date of the parent application for common subject matter. *See* MPEP §201.11. Therefore, Applicant is not required to designate Figures 1-7 by a legend such as – Prior Art – because the 09/681,420 Application is not prior art to the current application. Further, these figures also illustrate an embodiment of "the invention" and therefore are not prior art.

Rejection under §102(e)

The Examiner rejected claims 1-29 under 35 U.S.C. §102(e) as being anticipated by Machida. Responsive thereto, Applicant refers the Examiner to the Declaration Under 37 CFR §1.131 enclosed herewith. As set forth in the Declaration, the subject matter of this patent application was conceived prior to the effective date of Machida and Applicant used due diligence in filing its application. Accordingly, Applicant believes that Machida is disqualified as prior art against the claimed invention and any rejection based thereon must be withdrawn.

Rejection under §102(b)

The Examiner then rejected claims 1-4, 7, 8, 10-12, and 22 under 35 U.S.C. §102(b) as being anticipated by the Dietrich et al. article "Extending the coverage of true volume scans by continuous movement of the subject". However, in order to anticipate a claim, the reference

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must teach <u>each and every element</u> of the claim. Applicant believes the Examiner has not shown that the Dietrich et al. article teaches each and every element of the claimed invention. Furthermore, Applicant believes one of ordinary skill in the art will readily acknowledge numerous distinctions between the current invention and the art cited by the Examiner.

Regarding claim 1, the Examiner states that Dietrich et al. teaches "continuously moving one of the optimal imaging volume and an imaging object in the first direction while repeatedly exciting and encoding spins with readout in the first direction to acquire data that is restricted to the selected slab thickness until at least one image of the FOV can be reconstructed." To support this assertion, the Examiner cites "Dietrich et al., col. 1-col. 2 under INTRODUCTION, CONCEPT, and METHODS." However, Applicant does not find such support in the cited sections nor anywhere else in Dietrich et al.

One of ordinary skill in the art will readily recognize that the method of Dietrich et al. places the slice phase encoding direction in the direction of motion. *See* Concept Section. However, claim 1, in part, calls for "repeatedly exciting and encoding spins with readout in the first direction to acquire data that is restricted to the selected slab thickness." Therefore, while Dietrich et al. teaches slice phase encoding in the direction of motion, it does not teach placing the readout direction in the direction of motion. One of ordinary skill in the art will recognize this fundamental difference. As such, Applicant believes that claim 1 is patentably distinct from that which is taught by Dietrich et al.

Regarding the rejection of claims 2-4, 7, 8, 10-12, and 22 under §102(b) as being anticipated by the Dietrich et al., because the claims depend from an otherwise allowable claim, Applicant believes each of these claims is in condition for allowance pursuant to the chain of dependency.

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The Examiner next rejected claim 1 under §102(b) as being anticipated by Yoshitome (No. H6-311977). However, this reference does not teach, or even suggest, each and every element of the claim. Yoshitome teaches "using a sequence with the same gradient and number of samples as when imaging the entire imaging range." *See* Constitution. Claim 1, in part, calls for "selecting a slab thickness in a first direction," "continuously moving one of the optimal imaging volume and an imaging object in the first direction" and "exciting and encoding spins with readout in the first direction to acquire data that is restricted to the selected slab thickness." Simply, Yoshitome teaches imaging as if encoding the entire "imaging range larger than the imageable region." Id. Therefore, one of ordinary skill in the art will readily recognize that Yoshitome teaches away from restricting readout to the selected slab thickness. That is, Yoshitome teaches encoding the entire FOV, which is larger than an optimal imaging volume, not "exciting and encoding spins with readout in the first direction to acquire data that is restricted to the selected slab thickness." Simply, Yoshitome does not teach restricting the volume that is encoded when collecting data to the slab thickness. Rather, Yoshitome teaches encoding the entire imaging range.

Therefore, Applicant believes claim 1 is patentably distinct over Yoshitome. Furthermore, Applicant believes claims 2-15 are also in condition for allowance pursuant to the chain of dependency.

Rejection under §103(a)

Regarding the Examiner's rejection of claims 13-14 and 30 under 35 U.S.C. §103(a), Applicant respectfully disagrees with the Examiner with respect to the art. However, in light of each of the aforementioned claims depending from what is believed an otherwise allowable
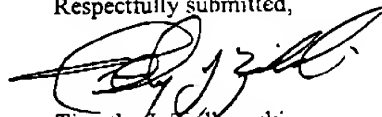
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claim, Applicant does not believe additional remarks are necessary and therefore requests

allowance of claims 13-14 and 30 pursuant to the chain of dependency.

Therefore, in light of the foregoing, Applicant respectfully believes that the present

application is in condition for allowance. Accordingly, Applicant respectfully requests timely

issuance of a Notice of Allowance for claims 1-30.

Marked-up versions of the amendments made above may be found on page 7.

Applicant appreciates the Examiner's consideration of these Amendments and Remarks

and cordially invites the Examiner to call the undersigned, should the Examiner consider any

matters unresolved.

Respectfully submitted,

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REVISIONS

26.   The computer program of claim 22 having further instructions to:

Fourier transform ~~MR~~ image data in z;

sort and align the z-transformed ~~MR~~ image data to match anatomic locations in z

to fill a matrix.